Dodging and Burning

An Introduction to Local Brightness Control in Photoshop

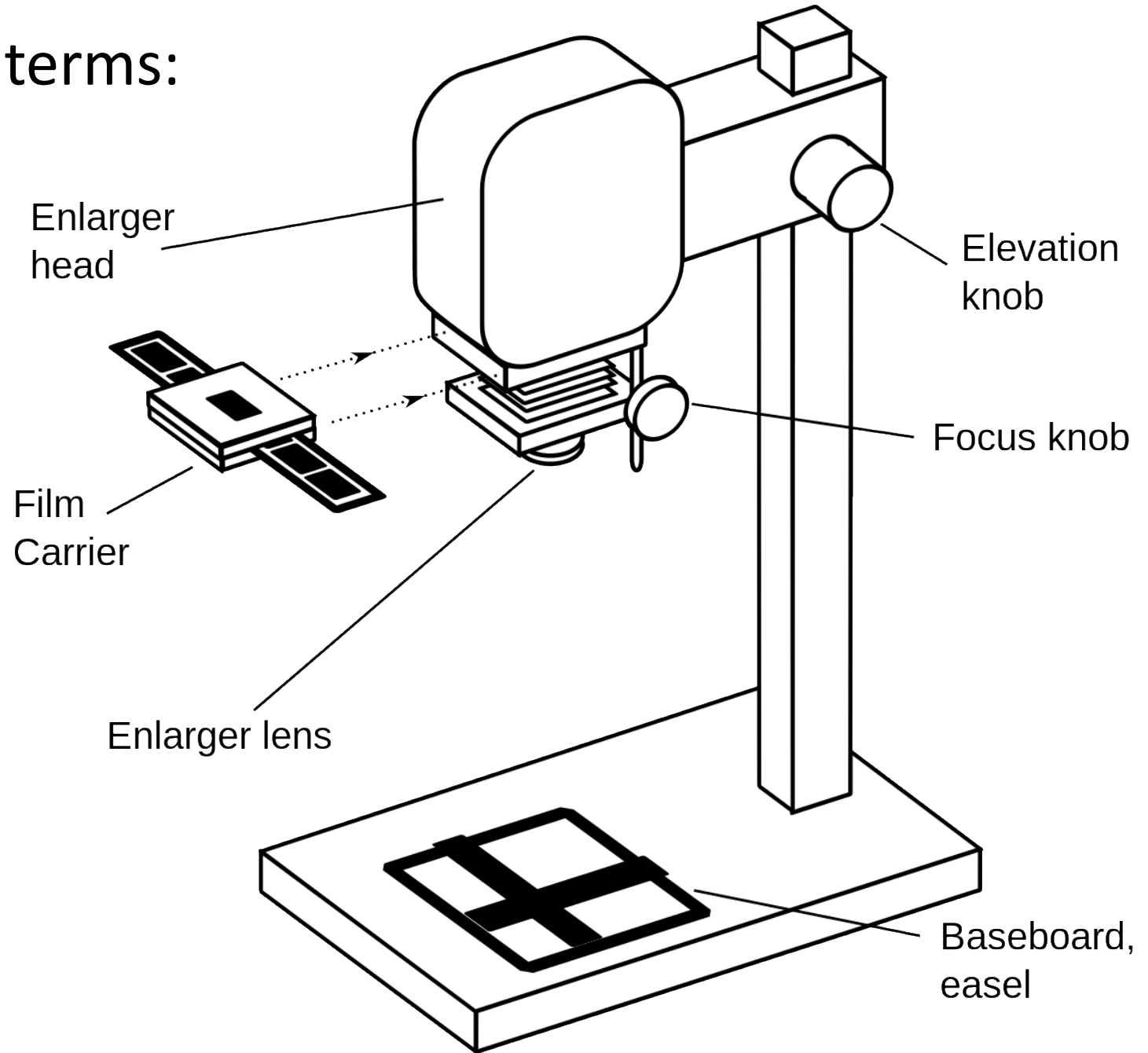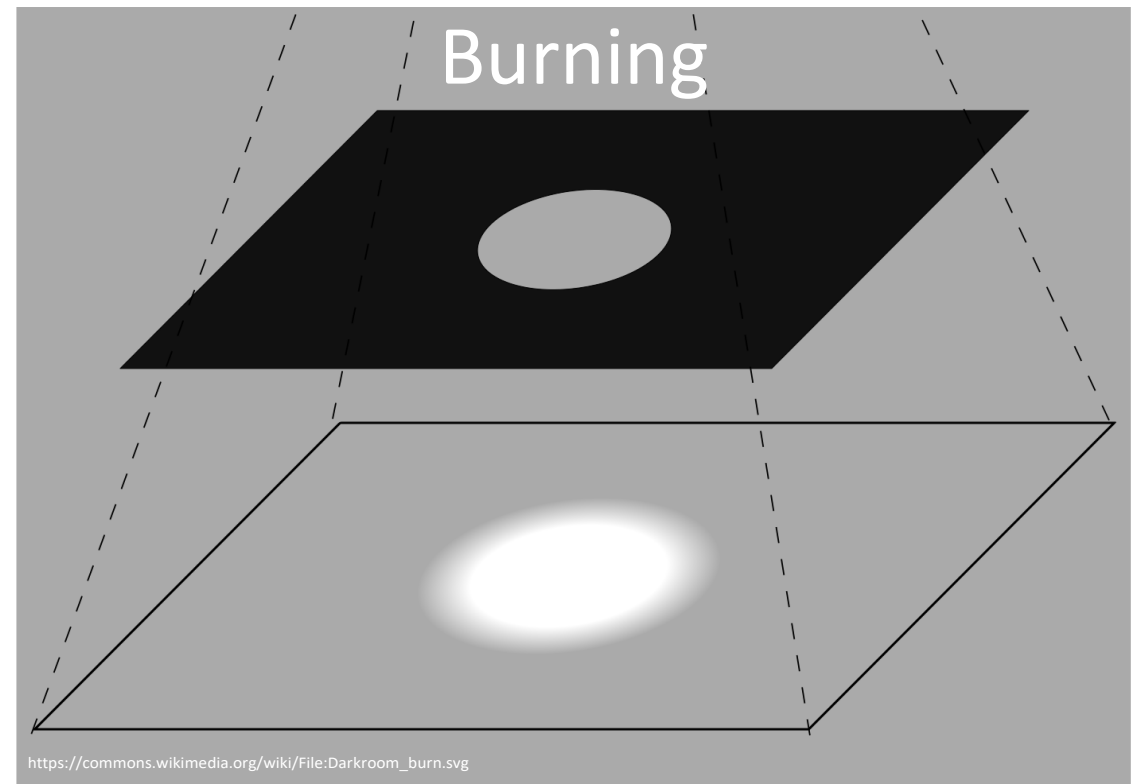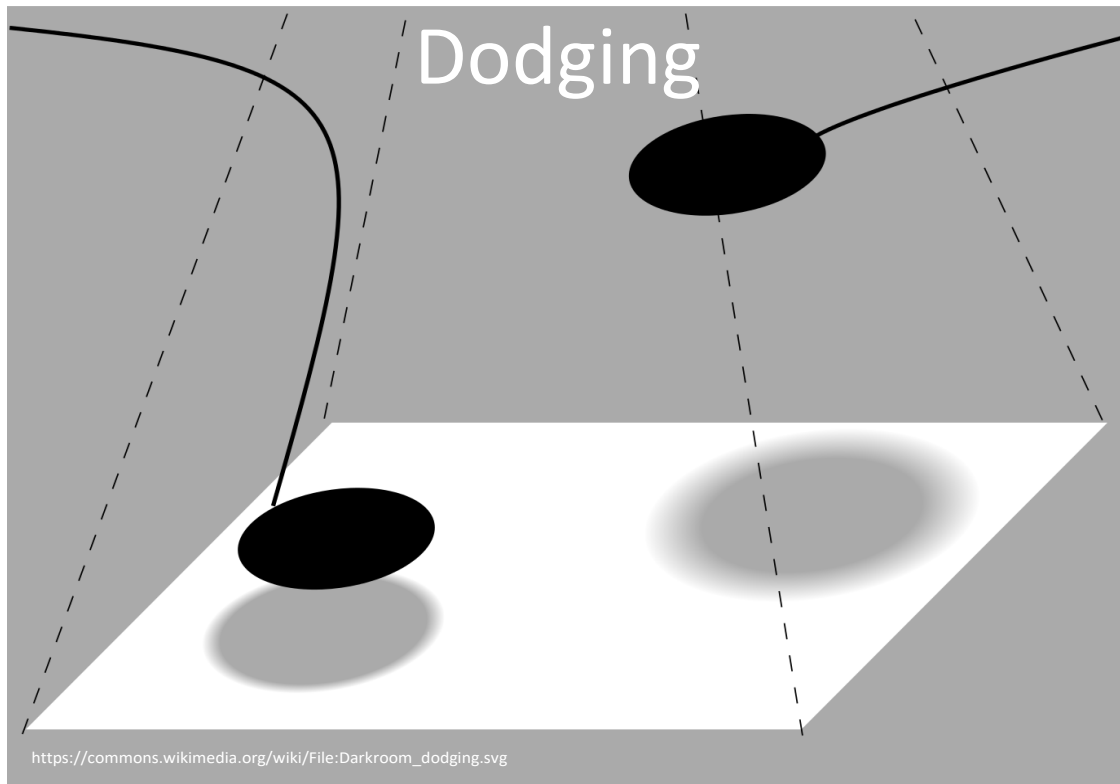who is dodging

climate debate?

Dodging and Burning

- What is Dodging and Burning, and the origins

- Dodging and Burning in Adobe Camera Raw

- Basic Dodging and Burning in Photoshop

- "Overlay" nondestructive Dodge and Burn

- "Apply Image" masking nondestructive Dodge and Burn

Dodging and Burning

- Dodging → Lightening

- Burning → Darkening

Origin of the terms:

Enlarger head

Elevation knob

Focus knob

Film Carrier

Enlarger lens

Baseboard, easel

https://commons.wikimedia.org/wiki/File:Darkroom_enlarger_en.svg

Dodging

Burning

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https://commons.wikimedia.org/wiki/File:Darkroom_burn.svg
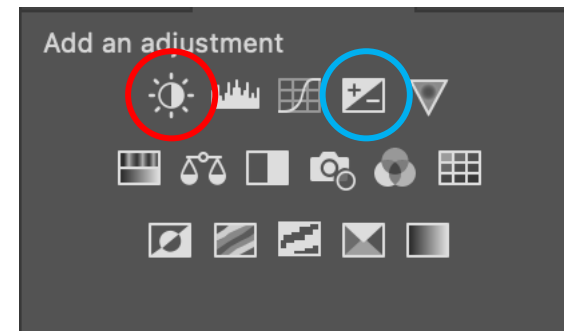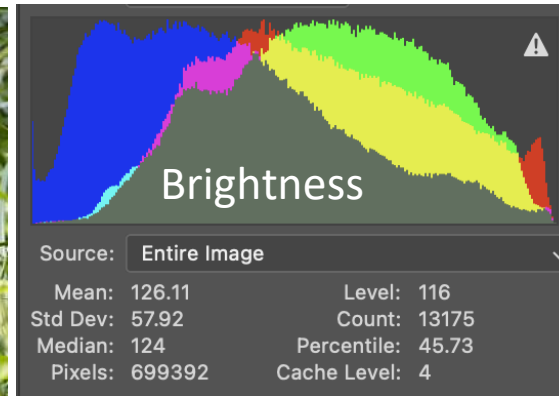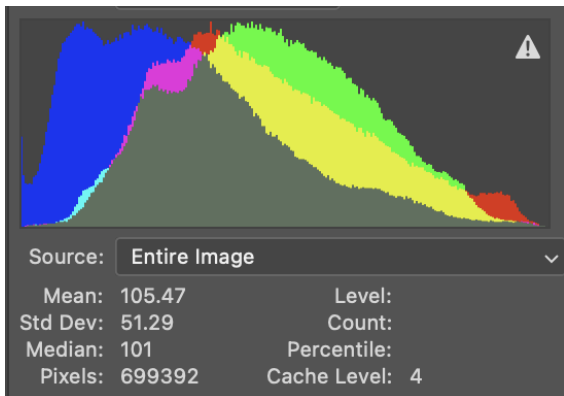
- Could be very confusing for the newcomer; more light = darker image
  - This is because the film and the print papers were mostly *negatives*

- Thankfully less confusing with modern digital cameras
  - Burning = darkening (think of paper getting darker as it burns)
  - Dodging = the opposite of burning, so it's lightening

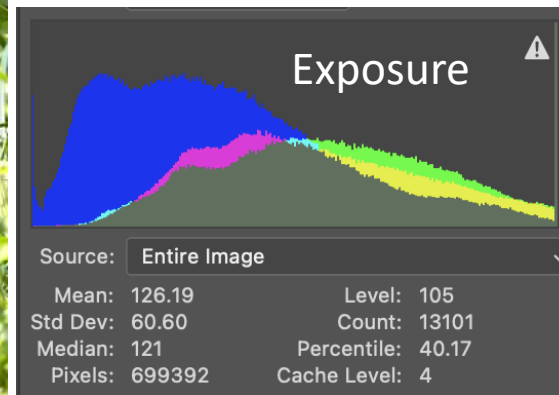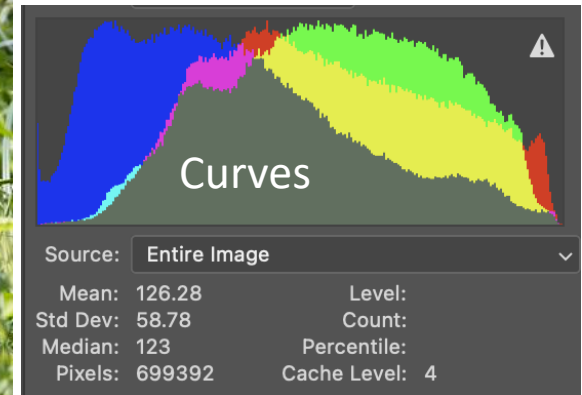- Dodge and Burn change the paper exposure

Dodging and Burning

- Dodging → Lightening (more exposure)

- Burning → Darkening (less exposure)

  } What do we mean by exposure?

- In Photoshop:

  - Exposure uniformly increases the lightness of the image across all values

    - Tends to blow out the highlights

  - Brightness preserves highlights, pulls up the mid tones

    - Acts like a simple curves stretch

Original

Brightness

Source: Entire Image

Mean: 126.11 Level: 116
Std Dev: 57.92 Count: 13175
Median: 124 Percentile: 45.73
Pixels: 699392 Cache Level: 4

Curves

Source: Entire Image

Mean: 126.28 Level:
Std Dev: 58.78 Count:
Median: 123 Percentile:
Pixels: 699392 Cache Level: 4

All adjusted to have the same mean pixel value

Source: Entire Image

Mean: 105.47 Level:
Std Dev: 51.29 Count:
Median: 101 Percentile:
Pixels: 699392 Cache Level: 4

Exposure

Source: Entire Image

Mean: 126.19 Level: 105
Std Dev: 60.60 Count: 13101
Median: 121 Percentile: 40.17
Pixels: 699392 Cache Level: 4

Dodging and Burning Within Adobe RAW

- Exposure and Brightness behave a little differently in ACR (there is no Brightness slider)

- Best approach is to balance the Exposure and Whites/Blacks sliders

  - Using just the Black/White sliders for dodging and burning tends to wash things out a little

Dodging and Burning Within Adobe RAW

Dodging and Burning Within Adobe RAW

DODGE

+0.25 Exposure
+5 Contrast
+10 Whites
+10 Clarity

BURN

-0.25 Exposure
+5 Contrast
-10 Blacks
+10 Clarity

Dodging and Burning Within Adobe RAW

- Why add Contrast and Clarity adjustments to dodge and burn?

  - A *little* contrast helps to counter-act the natural tendency for dodging and burning to wash things out and reduce color saturation. A small amount of contrast helps to recover this loss.

  - A *little* clarity helps to counter-act the apparent loss of detail that can occur during dodge/burn wash-out.

    - The new Texture slider can also be used in place of clarity, if desired. Helpful if noise is a problem in your image.

Dodging and Burning in Photoshop

- You can use either Brightness or Exposure for dodging and burning

- Recommend Brightness (Curves) as it preserves the highlights

- Photoshop appears to adopt a Curves approach to Dodge and Burn as standard

- You *can* Dodge and Burn an entire image, but usually these are applied as *local* adjustments to portions of an image

- Recommend layers for dodging and burning

- Most easily done within Photoshop, but can also be done within Adobe RAW
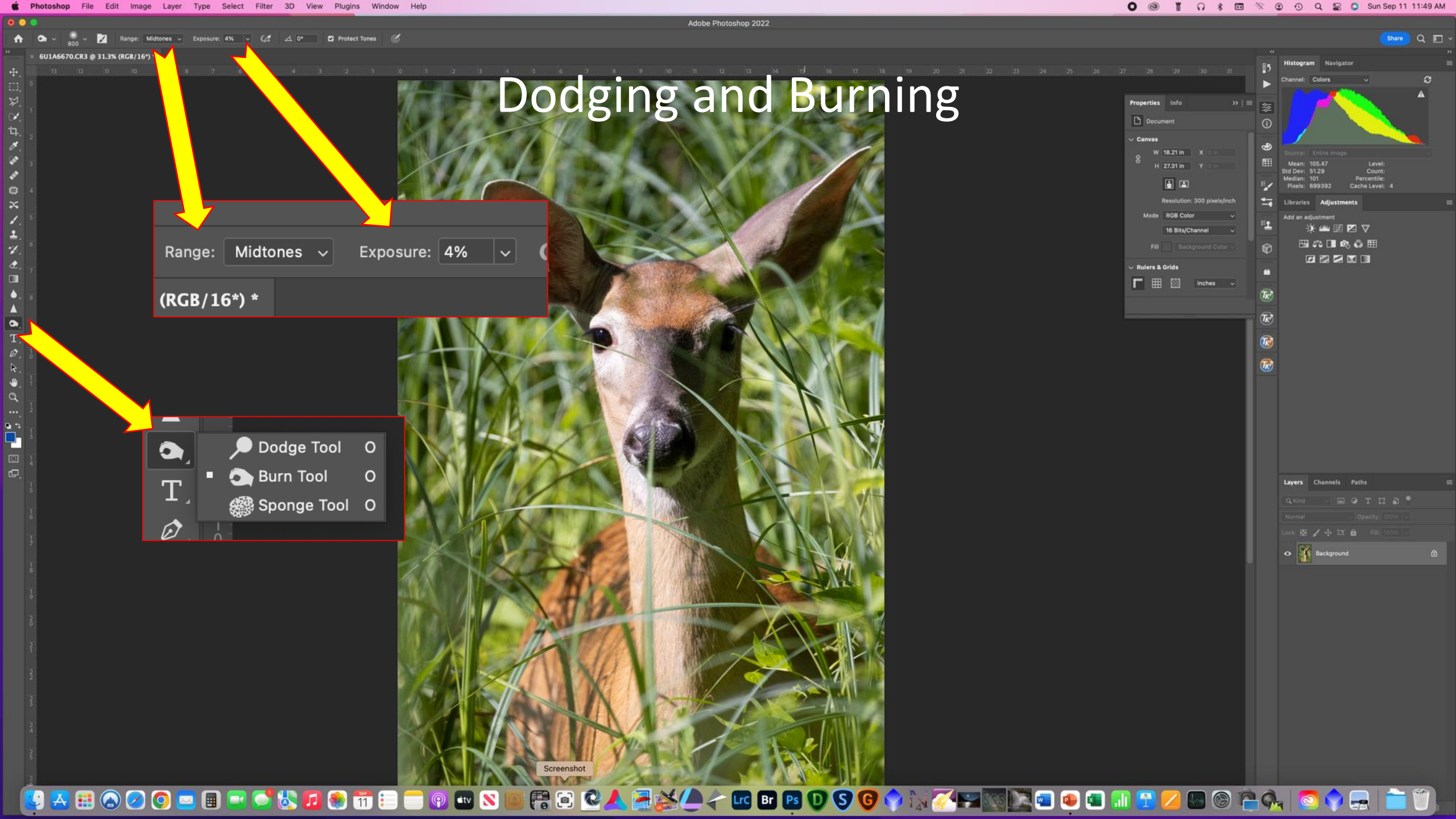
Dodging and Burning

"Overlay" Method for Non-Destructive Dodge and Burn in Photoshop

- Uses a single adjustment layer to do Dodge and Burn

- Uniform gray layer with Overlay blend mode

- How it works:

  - Overlay blend mode is normally used to boost image contrast

    - Contrast is increased by brightening the highlights and darkening the shadows

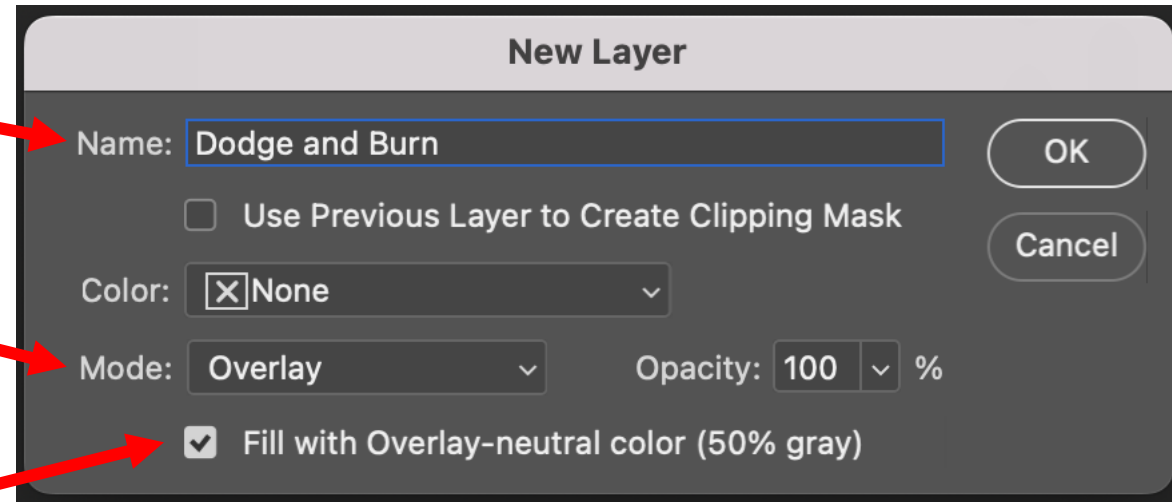 - But here we will uses a 50% gray layer to control which areas are lightened and darkened

"Overlay" Method for Non-Destructive Dodge and Burn in Photoshop

1. Create a new adjustment layer ("⊞" symbol) but hold down "Alt" (Windows) or "Option" (Mac)

Optional naming

Mode is "Overlay"

Check box for fill with 50% gray

New Layer

Name: Dodge and Burn

☐ Use Previous Layer to Create Clipping Mask

Color: ☒ None

Mode: Overlay   Opacity: 100 %

☑ Fill with Overlay-neutral color (50% gray)

OK

Cancel

2. Brush White to Dodge, Black to Burn (set Brush opacity to 5-10%)

"Apply Image" Method for Non-Destructive Dodge and Burn in Photoshop

- A pretty fool-proof method for dodging and burning in Photoshop

- Uses the lights and darks in your image to determine where to dodge and burn

  - Creates masks **defined** by the lights and darks in your image

- Blends the mask seamlessly and realistically using "Apply Image"

"Apply Image" Method for Non-Destructive Dodge and Burn in Photoshop

1. Add a Curves adjustment layer

2. Pull the Curve "up and left" which brightens the whole image

3. Make the layer mask "Black" which effectively hides the Curves layer

   - "Control I" (Windows) or "Command I" (Mac) to invert the layer mask, effectively making it black.

4. Use the brush tool to paint White over areas where you want to dodge

5. Blend in the layer to make it look realistic

   - ☞ Image ☞ Apply Image ☞ default parameters ☞
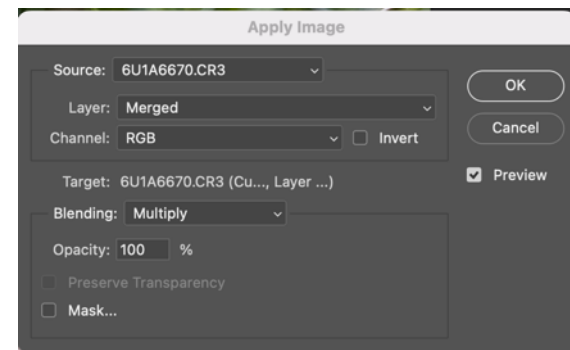
"Apply Image" Method for Non-Destructive Dodge and Burn in Photoshop

6. "Alt + click" (Windows) or "Option + click" (Mac) on the layer mask to see how the image itself has defined the layer mask

7. For "Burn", add a second Curves adjustment layer and pull the curve "down and right" to darken the image

8. Repeat the same steps we used for Dodge to produce a nicely blended Burn layer

- Invert the layer mask
- Paint white to define the Burn areas
- Blend using Apply Image BUT click "INVERT"
  - Makes the mask visible in the darker areas
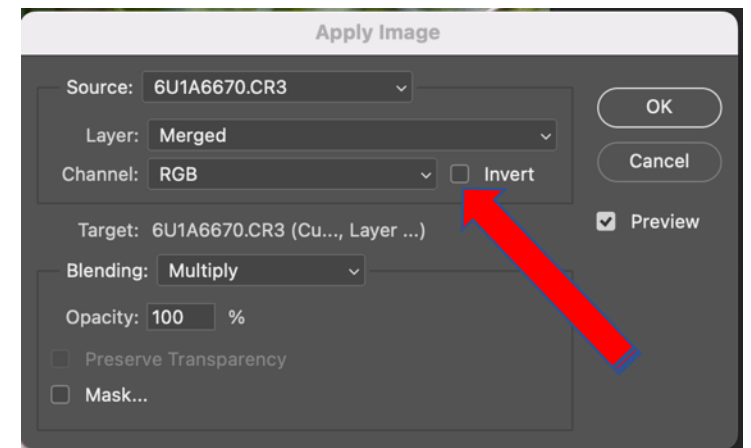
"Apply Image" Method for Non-Destructive Dodge and Burn in Photoshop

- The same method can also be applied using any masking technique

  - Lasso, subject select, magic wand, etc. in Photoshop

  - Gold standard masking is Tony Kuyper TK7 or TK8 luminescence masking

    - Super powerful and a full talk in its own right

    - Allows mask creation based on luminance, color, saturation, zones, levels, color channels, hue, vibrance